

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method for purification of contaminated water by hydrate formation and separation of hydrates from contaminated water enriched with contaminants characterized in that the water to be purified is passed via a first pipe into a first container with suitable pressure and temperature conditions to obtain hydrate formation, in said container the water is mixed with a hydrate-forming compound which is supplied via a second pipe, wherein at least a portion ~~some~~ of the mixture of hydrate and contaminated water is recycled to said first container via a ~~a~~ third pipe as hydrate-forming seed, and the rest is passed to a separator where the mixture is separated into contaminated water and ~~pure~~ a hydrate, the hydrate is passed to a second container via a fourth pipe, in said second container the temperature is raised so that the hydrate dissociates into pure water and hydrate-forming compound, the hydrate-forming compound from said second container is passed back to the first container for hydrate formation via said second pipe and the pure water is taken out as a product.
2. (Previously Presented) The method according to Claim 1, wherein the contaminants comprise one or more components selected from the group consisting of hydrocarbons, organic and inorganic salts, dust, mud, metals, sand, gas, radioactive compounds, and biological material.
3. (Currently Amended) The method according to Claim 1, wherein the ~~contaminants~~ contaminated water which ~~[[have]]~~ has been separated off ~~[[are]]~~ is handled by recirculation to upstream process steps or deposition/disposal.
4. (Previously Presented) The method according to Claim 1, wherein hydrate formation is carried out in several steps by subjecting the contaminated water from the separator to repeated hydrate formation processes in series until the concentration of contaminants in the contaminated water is too high for further hydrate formation.

5. (Currently Amended) The method according to Claim 1, wherein the ~~harvested~~ hydrates harvested from the separator are subjected to a washing step prior to dissociation to pure water and hydrate forming gas.

6. (Currently Amended) The method according to Claim 1, wherein the hydrate forming compound supplied to the first container through the second pipe is selected from lower hydrocarbons, CO₂, halogenated hydrocarbons, wherein halogen is selected from chlorine and fluorine, tetrahydrofuran, ethylene oxide, noble gases selected from helium, neon, argon, xenon, krypton, sulphur hexafluoride, dinitrogen oxide, ~~preferably C₁-C₆ hydrocarbons or CO₂, more preferably methane, ethane, propane, CO₂, most preferably methane or CO₂.~~

7. (Currently Amended) The method according to Claim 1, wherein the pressure and temperature conditions are:

~~T < 30°C, P > 1 bar, preferably T < 20°C, P > 5 bar, most preferably T < 10°C, P > 20 bar.~~

8. (Currently Amended) The method according to Claim 1, wherein the hydrate particles which are supplied through the third pipe to the hydrate formation step have a diameter of maximum 3 mm, ~~preferably maximum 500 µm, still more preferably maximum 100 µm.~~

9. (Currently Amended) The method according to Claim 1, wherein the hydrate is ~~harvested~~[[ing]] ~~by a~~ process [[is]] selected from the group consisting of sedimentation, filtration, centrifugation, flotation.

10. (Previously Presented) The method according to Claim 1, wherein the hydrates dissociate through an increase in temperature and/or reduction in pressure.

11. – 14. (Cancelled)

Please add the following new claims:

15. (New) The method according to Claim 6, wherein the hydrate forming compound supplied to the first container through the second pipe is selected from C₁-C₅ hydrocarbons or CO₂.

16. (New) The method according to Claim 15, wherein the hydrate forming compound supplied to the first container through the second pipe is selected from methane, ethane, propane, CO₂.

17. (New) The method according to Claim 16, wherein the hydrate forming compound supplied to the first container through the second pipe is selected from methane or CO₂.

18. (New) The method according to Claim 7, wherein the pressure and temperature conditions are:

T < 20°C, P > 5 bar.

19. (New) The method according to Claim 18, wherein the pressure and temperature conditions are:

T < 10°C, P > 20 bar.

20. (New) The method according to Claim 8, wherein hydrate particles which are supplied through the third pipe to the hydrate formation step have a diameter of maximum 500 µm.

21. (New) The method according to Claim 20, wherein hydrate particles which are supplied through the third pipe to the hydrate formation step have a diameter of maximum 100 µm.

22. (New) The method according to Claim 1, wherein the hydrate separated by the separator is a pure hydrate.